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## Amendments to the Claims:

- 1. (Amended) A method of detecting a retroviral genetic recombinant having encoding a functional gag polypeptide and a functional pol polypeptide functions:
  - a) introducing into a first cell a trans-viral vector system;
  - b) culturing said first cell to allow viral particle formation;
- c) transducing a population of cells with a population of viarl particles of step b), wherein members of said viral particle population may comprise providing a cell suspected of having said said recombinant; recombinant, wherein said recombinant may be propagated in the presence of one or more helper functions to permit detection of said recombinant; and
- d) providing in trans to said population of colls at least one helper function comprising an envelope polypeptide or a pseudetype thereof;
- e) propagating said recombinant in the presence of said one or more helper function functions and:
  - f) determining the presence of said to thereby detect said recombinant.
- 2. (Amended) The method of claim 1 wherein said recombinant is integrated into the genome of said cells in said population-said cell.
- 3. (Amended) The method of claim 1 wherein said trans-viral vector system is a trans-lenti vector system recombinant in detected using an assay.
- 4. (Amended) The method of claim 1.3 wherein determining the presence of said recombinant comprises an said assay is selected from one or more members of the group of assays consisting of FISH, PCR, antigen-detection, Tat transfer, Gag transfer, and mobilization.
- 5. (Amended) The method of claim 1 wherein said recombinant comprises one or more genetic elements selected from the group consisting of retroviral cis-acting sequences and

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retroviral coding sequences, wherein said genetic elements facilitate reverse transcription and integration.

## claims 6 - 8 (Canceled)

- 9. (Original) The method of claim 1 wherein said recombinant is capable of mobilizing a nucleic acid sequence.
- 10. (Original) The method of claim 9 wherein said nucleic acid sequence is selected from one or more of the group consisting of a mobilizable marker gene, a retroviral nucleic acid sequence, and said recombinant.

## 11. (Canceled)

- 12. (Amended) The method of claim 10 wherein said marker gene is a selectable marker gene integrated within a chromosome of said cells in said population cell.
- 13. (Amended) The method of claim 12 wherein said marker gene <u>imparts encodes</u> antibiotic resistance.
- 14. (Amended) The method of claim 13 wherein said marker gene imparts antibiotic resistance to is-puromycin.
- 15. (Original) The method of claim 10 wherein said marker gene expression is controlled by a promoter, said promoter selected from the group of promoters consisting of constitutive and inducible promoters.
- 16. (Original) The method of claim 10 wherein said marker gene is flanked by cisacting sequences for encapsidation, reverse transcription, and integration.

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Claims 17-50 (cancelled)

(New) The method of claim 1, wherein said method is used to evaluate the risk of producing a replication-competent retrovirus from a retroviral-based vector.